Reel #97

Danilova, B.

DANILOVA, B., inzh. (Kiyev).

Increasing the strength of silicate products. Stroi. mat. 3 no.12:
30-31 D '57. (MIRA 11:2)
(Silicates--Testing)

DANILOVA, B.S., kand.med.nauk (Moskva, Pushkinskaya ul. d.16, kv.5)

Absorbability and permeability in normal health and peritonitis [with summary in English, p.159]. Vest.khir. 80 no.1:97-103 Ja '58.
(MIRA 11:4)

1. Iz khirurgicheskoy kliniki Moskovskogo stomatologicheskogo instituta (zav. - prof. P.L.Sel'tsovskiy) na baze 33-y klinicheskoy bol'nitsy im. Ostroumova (gl. vrach P.V.Abashkina)

(PERITONITIS, exper.
eff. of hypothermia & radiations on resorption in dogs administered penicillin (Rus))
(HYPOTHERMIA, eff.
on resprption in exper. peritonitis in dogs administered penicillin (Rus))
(RADIATIONS, eff.
same)
(PENICILLIN, eff.
on resorption in exper. peritonitis in dogs treated with hypothermia & radiations (Rus))

DANILOVA, B.S., kand.med.nauk

Absorptive properties of the inflamed peritoneum. Vest.khir. 85 no.10:10-12 O '60. (MIRA 13:12)

1. Iz khirurgicheskoy kliniki (zav. - prof. P.L. Sel'tsovskiy) Moskovskogo meditsinskogo stomatologicheskogo instituta.
(PERITONITIS)

DANILOVA, B.S., kand.med.nauk; BOBROVSKIY, N.S.; BRAVERMAN, I.B.; NECHAYEV, V.A.

Use of nitrous oxide for the prevention and treatment of traumatic shock under conditions of first aid. Sov.med. 28 no.4:104-107 Ap '65. (MIRA 18:6)

1. Stantsiya skoroy pomoshchi (nachal'nik - zasluzhennyy vrach RSFSR L.B.Shapiro), Moskva.

ABLOVA, E., arkhitektor; VERSTIN, G., inzh.; DANILOVA, F., inzh.;
SHAPIRO, D., inzh.

Experimental frame-slab school on the state farm "Zaria Kommunizma." Sel'. stroi. no.12:8b-10 D '62.
(MIRA 16:1)

(Moscow Province—Schoolhouses)
(Precast concrete construction)

BOBKOV, L.S.; DANILOVA, G.F.

Painting of bicycle parts in a conveyor. Lakokras.mat.i ikh prim. no.1:67-70 '61. (MIRA 14:4)

1. Iz opyta raboty Moskovskogo avtozavoda imeni I.A.Likhacheva.
(Bicycles and tricycles--Painting)

BOBKOV, L.S.; DANILOVA, G.F.

Painting of motorbuses in the I.A. Likhachev Automobile Plant.
Lakokras.mat.i ikh prim. no.3:83-84 '62. (MIRA 15:7)
(Motorbuses--Painting)

C.A.
1951
Danilova, G. M.

Chemical Industry
Miscellaneous Industrial Products
13

Heat conduction of liquid Freons. G. Danilova (Central Inst. Refrig. and Milk Ind.). *Kholodil'naya Tekh.* 28, No. 2, 22-6(1951).—The coeff. of heat conduction (λ) for Freon-11 and Freon-12 in the liquid state at various temps. were: −30° 0.103, 0.091; −20° 0.099, 0.087; −10° 0.095, 0.083; 0° 0.091, 0.079; 10° 0.087, ; 20° 0.082. The λ for Freon-11 can be calcd. with the equat. $\lambda = 0.091-0.00041t$ ..., and for Freon-12 $\lambda = 0.079-0.00041t$... where t is the temp. M. M. Piskur

DANILOVA, G. M.

DANILOVA, G., detsent, kandidat tekhnicheskikh nauk; **MAZYUKEVICH, I.**, detsent, kandidat tekhnicheskikh nauk.

Examining the boiling process of some refrigerants. Khol.tekh. 31 no.2:62-65 Ap-Je '54. (MLRA 7:7)
(Refrigerants)

DANILOVA, G.K.

Late results of treating adolescent and adult patients with tuberculous meningitis without subarachnoid administration of streptomycin. Probl.tub. no.1:63-66 '62. (MIRA 15:8)

1. Iz terapevticheskogo otdeleniya (zav. Z.A. Roshchina) Voronezhskogo oblastnogo protivotuberkuleznogo dispansera (glavnyy vrach - zasluzhennyy vrach RSFSR N.S. Pokhvisneva).
(MENINGES--TUBERCULOSIS)

TKACHEV, A. G., DANILOVA, G. M.

"Heat Exchange at the Refrigeration of the Concrete Masonry of Dams."

Report submitted for the 10th Intl. Refrigeration Congress, Copenhagen, 19 August - 2 September 1959.

DANILOVA, G.M.

NEL'ZINA, Ye.N.; DANILOVA, G.M.

Data on biology of ticks of the family Haemogamasidae (Gamasoidea, Parasitiformes). Part 1: Feeding of Haemogamasus citelli Breg. et Nels. and H. nidi Mich. Med.paraz. i paraz.bol. 25 no.4:352-358 O-D '56. (MLRA 10:1)

1. Iz Rostovskogo-na-Donu nauchno-issledovatel'skogo protivochumnogo instituta (dir. instituta A.K.Shishkin)

(TICKS
Haemogamasus citelli & Haemogamasus nidi, feeding (Rus))

USSR

3

Abs Jour : Ref Zhur - Biologiya, No 22, 1958, No 99614

Author : Nel;zina, Ye.N.; Romanova, V.P.; Danilova, G.M. *

Inst : Not given

Title : On the Role of Gamasid Mites of the Genus Hirstionyssus Fonseca in Natural Foci of Tularemia.

Orig Pub : Med.parazitol.i parazitarn.bolezni,1957,26,No.3,326-333.

Abstract : It was demonstrated that H.isabellinus, H.musculi and H. criceti are capable of acquiring tularemic bacteria during suction of blood from white mice diseased with tularemia; they are capable of preserving them in the organs for the duration of their lives and transmit them through bites to healthy animals. Observations were carried out by the individual method, i.e., with individual females. A high susceptibility was observed in the first 2 species (90-100%); it was weaker in the last

* Sokolova, K.S.

Card 1/2

MEL'ZINA, Ye.N.; DANILOVA, G.M.

Rhipicephalus schulzei Ol. (family Ixodidae), a burrow parasite of the Siberian marmot. Med.paraz.i paraz.bol. 29 no.3:291-300 '60. (MIRA 13:12)

(TICKS) (PARASITES—MARMOTS)

NEL'ZINA, Ye.N.; DANILOVA, G.M.; CHERNOVA, N.I.

Number and spatial distribution of the micropopulations of bloodsucking Arthropoda within the microbiotopes of the suslik Citellus pygmaeus. Med. paraz. i paraz. bol. 32 no.1:45-55 Ja-F'63. (MIRA 16:10)

1. Rostovskiy-na-Donu nauchno-issledovatel'skiy protivochumnyy institut i Astrakhanskaya protivochumnaya stantsiya.

*

MIRONOV, N.P.; NEL'ZINA, Ye.N.; KLIMCHENKO, I.Z.; REZINKO, D.S.; CHERNOVA, N.I.; DANILOVA, G.M.; SAMARINA, G.P.; RODIONOVA, A.V.

Spatial distribution of fleas in the burrows of the lesser suslik (Citellus pygmaeus) and efficient methods of estimating their abundance. Zool. zhur. 42 no.3:384-394 '63. (MIRA 17:1)

1. Rostov-on-Don Research Anti-Plague Institute, and Astrakhan Anti-Plague Station.

NEL'ZINA, Ye.N.; DANILOVA, G.M.

Materials on the biology of mites of the family Haemogamasidae (Gamasoidea, Parasitiformes). Report No.2: External morphology and biology of the postembryonic phases in the development of Haemogamasus citelli Breg. et Nelz. and Haemogamasus nidi Mich. Mat. k pozn. fauny i flory SSSR. Otd. Zool. no.39:221-243 '64.

(MIRA 17:6)

DANILOVA, Galina Nikolayevna; FILATKIN, Vladimir Nikolayevich;
CHERNAYA, Roza Grigor'yevna; SHCHERBOV, Mark Gennadiyevich;
Prinimali uchastiye: BUCHKO, N.A.; VAS'KOV, Ye.T., inzh.;
CHICHKOV , N.V., red.; GROMOV, A.S., tekhn. red.

[Collection of problems and calculations on heat transmission]
Sbornik zadach i raschetov po teploperedache. By G.N.Danilova
i dr. Moskva, Gos.izd-vo torg. lit-ry, 1961. 270 p.
(MIRA 15:1)
(Heat transmission)

ROZENFEL'D, Lev Markovich, prof., doktor tekhn.nauk; TKACHEV, Anatoliy Georgiyevich, prof., doktor tekhn.nauk; GUREVICH, Yevgeniy Semenovich, inzh.; ONOSOVSKIY, V.V., inzh.; SERDAKOV, G.S., inzh.; TSYRLIN, B.L., inzh.; KALNIN', I.M., inzh.; ROMANOVSKIY, N.V., inzh.; YATSUNOV, I.F., inzh.; DANILOVA, G.N., dotsent; MIKHAL'SKAYA, R.N., inzh.; KARNAUKH, M.S., inzh.; STUKALENKO, A.K., inzh.; IL'IN, A.Ya., inzh.; TSIPERSON, A.L., red.; BABICHEVA, V.V., tekhn.red.

[Examples and designs of refrigerating machines and apparatus] Primery i raschety kholodil'nykh mashin i apparatov. Moskva, Gos. izd-vo torg.lit-ry, 1960. 237 p. [___Thermodynamic diagrams of the refrigerants used] ___Termodinamicheskie diagrammy rabochikh tel kholodil'nykh mashin. (MIRA 13:9)
(Refrigeration and refrigerating rachinery)

TKACHEV, A.G., doktor tekhn.nauk, prof.; DANILOVA, G.N., kand.tekhn.nauk;
SYROVTSEVA, N.N., kand.tekhn.nauk; SYROVTSEVA, N.N., inzh.

Heat exchange during the artificial cooling of concrete
in constructing dams. Gidr.stroi. 29 no.3:37-39 Mr '60.
(MIRA 13:6)
(Dams) (Concrete construction)

TKACHEV, A.G., doktor tekhn.nauk, prof.; DANILOVA, G.N., kand.tekhn.
nauk; BEL'SKIY, V.K., inzh.

Labratory experiments in investigating the pipe method of cooling concrete. Gidr. stroi. 30 no.9:18-21 S '60.
(MIRA 13:9)
(Concrete construction)

BADYL'KES, I.S., prof., doktor tekhn.nauk; BUKHTER, Ye.Z., inzh.; VEYNBERG, B.S., kand.tekhn.nauk; VOL'SKAYA, L.S., inzh.; GERSH, S.Ya., prof., doktor tekhn.nauk [deceased]; GUREVICH, Ye.S., inzh.; DANILOVA, G.N., kand.tekhn.nauk; YEFIMOVA, Ye.V., inzh.; IOFFE, D.M., kand.tekhn.nauk; KAN, K.D., kand.tekhn.nauk; LAVROVA, V.V., inzh.; MEDOVAR, L.Ye., inzh.; ROZENFEL'D, L.M., prof., doktor tekhn.nauk; TKACHEV, A.G., prof., doktor tekhn.nauk; TSYRLIN, B.L.; SHUMELISHSKIY, M.G., inzh.; SHCHERBAKOV, V.S., inzh.; YAKOBSON, V.B., kand.tekhn.nauk; GOGOLIN, A.A., retsenzent; GUKHMAN, A.A., retsenzent; KARPOV, A.V., retsenzent; KURYLEV, Ye.S., retsenzent, LIVSHITS, A.B., retsenzent; CHISTYAKOV, F.M., retsenzent; SHEYNDLIN, A.Ye., retsenzent; SHEMSHEDINOV, G.A., retsenzent; PAVLOV, R.V., spetsred.; KOBULASHVILI, Sh.N., glavnyy red.; RYUTOV, D.G., zam.glavnogo red.; GOLOVKIN, N.A., red.; CHIZHOV, G.B., red.; NAZAROV, B.A., glavnyy red.izd-va; NIKOLAYEVA, N.G., red.; EYDINOVA, S.G., mladshiy red.; MEDRISH, D.M., tekhn.red.

[Refrigeration engineering; encyclopedic reference book in three volumes] Kholodil'naia tekhnika; entsiklopedicheskii spravochnik v trekh knigakh. Glav.red. Sh.N.Kobulashvili i dr. Leningrad, Gostorgizdat. Vol.1. [Techniques of the production of artificial cold] Tekhnika proizvodstva iskusstvennogo kholoda. 1960. 544 p. (MIRA 13:12)

(Refrigeration and refrigerating machinery)

ALEKSANDROV, S.V.---(continued) Card 2.

1. Vsesoyuznyy institut rasteniyevodstva (for Sechkarev, Lizgunova, Brezhnev, Gazenbush, Meshcherov, Filov, Tkachenko, Kazakova, Krasochkin, Levandovskaya, Shebalina, Syskova, Makasheva, Ivanov, Martynov, Girenko, Ivanova, Shilova). 2. Gribovskaya ovoshchnaya selektsionnaya opytnaya stantsiya; chleny-korrespondenty Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Alpat'yev, Solov'yeva). 3. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Brezhnev).

(Vegetables--Varieties)

DANILOVA, G. N., and BOGDANOV, I. N.

"Determination of Thermofhysical Properties of Some Concrete and Gravels Applied to the Concrete Dam Constructions."

Report submitted for the Conference cn Heat and Mass Transfer, Minsk, BSSR, June 1961.

DANILOVA, G.N., and BEL'SKIY V.K.

"Heat Transfer at Boiling of Frenny - 22 in a Large Volume under the Free Motion Conditions."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

DANILOVA, G.N.; BUCHKO, N.A.

Method for calculating the temperature field and the mean volume temperature in the laying of blocks in massive concrete structures. Inzh.-fiz.zhur. 5 no.1:92-95 Ja '62. (MIRA 15:3)

1. Tekhnologicheskiy institut kholodil'noy promyshlennosti, Leningrad.

(Concrete construction)

DANILOVA, G.N., kand.tekhn.nauk; BUCHKO, N.A., inzh.

Approximation method of determining temperatures of concrete masonry in dams under construction. Gidr.stroi. 33 no.4:26-29 Ap '63. (MIRA 16:4)

(Dams) (Concrete—Thermal properties)

DANILOVA, G.N., kand.tekhn.nauk

Effect of pressure and saturation temperature on heat exchange in the boiling of Freons. Khol.tekh. 42 no.2:36-42 Mr-Ap '65. (MIRA 18:5)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti.

DANILOVA, G.N., kand. tekhn. nauk; BEL'SKIY, V.K.

Studying the heat transfer in the boiling of Freons 113 and 12 on pipes with various roughness. Khol. tekh. 42 no.4:24-28 Jl-Ag '65. (MIRA 18:9)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti.

DANILOVA, G.P.; DRUZHININA, I.P.; MAL'TSEV, M.V.

Investigating ternary alloys of titanium-aluminum-manganese and titanium-alluminum-iron. Izv.vys. ucheb. zav.; tsvet. met. no.3:115-121 '58. (MIRA 11:11)

1. Moskovskiy institut tsvetnykh metallov i zolota. Kafedra metallovedeniya.
(Titanium-aluminum-manganese alloys--Metallography)
(Titanium-aluminum-iron alloys--Metallography)

SOV/149-58-6-12/19

AUTHORS: Mal'tsev, M.V., Danilova, G.P. and Druzhinina, I.P.

TITLE: Investigation of the Ternary Titanium-aluminium-niobium and Titanium-aluminium-molybdenum Alloys (Issledovaniye troynykh splavov titan-alyuminiy-niobiy i titan-alyuminiy-molibden)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya Metallurgiya, 1958, Nr 6, pp 108-114 + 1 plate (USSR)

ABSTRACT:

The object of the present investigation was to study the Ti-rich alloys of the ternary Ti-Al-Nb and Ti-Al-Mo systems and to select those that by virtue of the best combination of mechanical properties (high strength and ductility) would be most suitable for manufacturing welded sheet structures designed to operate at sub-zero and elevated temperatures. In the exploratory stage, alloys containing 2-6% Al with 2-6% Mo and 2-6% Al with 1-8% Nb were studied. Magnesium reduced titanium was used in the preparation of the experimental alloys which were melted and cast in helium. The cast ingots were hot forged at 1 000 - 800 °C, to produce square rods from which test pieces for mechanical tests and metallographic examination were prepared. After it had been established that the

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Investigation of the Ternary Titanium-aluminium-niobium and Titanium-aluminium-molybdenum Alloys

5) Mechanical properties - a) U.T.S. kg/mm^2, b) yield point kg/mm^2, c) elastic limit, kg/mm^2, d) elongation, %, e) reduction of area, %, f) impact strength, kgm/cm^2. It was found that higher ductility and impact strength were obtained when forging was carried out at 1 000 - 800 °C and the harmful effect of employing higher forging temperatures was attributed to the excessive growth of the β-phase which, on decomposing, produced coarse, needle-like constituents. The microstructures of the 4% Al, 3% Mo alloy hot-forged at i) 1100 - 900 °C and ii) 1 000 - 800 °C are shown in Figure 1. In view of these results, in all subsequent work the investigated alloys were forged within the 1 000 - 800 °C temperature range. A continuous oil-fired furnace was used for pre-heating, the heating cycle consisting of 2 hours at 800 °C, followed by slow heating to 1 000 °C. The ingots, cut into several parts, were forged to produce either rods or flat stock. The latter was then hot-rolled at 1 000 - 800 °C to sheet measuring 3 x 700 x 2 000 mm, 90% reduction in thickness being

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alloys is shown in Figures 2 and 3, respectively. It is postulated that low ductility of alloys annealed at 400 - 500 °C was due to the precipitation of the hard, metastable ω phase (not visible under the microscope) formed as a result of decomposition of the β phase. The increased ductility and reduced strength of alloys annealed at higher temperatures was attributed to the formation of stable α-phase. The variation of the mechanical properties of the investigated alloys within the -196 to + 500 °C temperature range is shown in Figure 4 (5% Al, 4% Nb alloy) and Figure 5 (4% Al, 3% Mo alloy), where a_k - impact strength, kg-m/cm^2, other symbols denoting the same properties as in Figures 2 and 3. It will be seen that unlike other alloys, such as Ti-Al-Mn, Ti-Al-Fe, Ti-Al-V, etc., the two alloys under consideration are characterised by high strength and high ductility at sub-zero temperatures. Thus, at -196 °C the 5% Al, 4% Nb alloy has

Card5/7 σ_B = 150 kg/mm^2, δ = 10%, ψ = 35% and a_k = 5 kg-m/cm^2,

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Investigation of the Ternary Titanium-aluminium-niobium and Titanium-aluminium-molybdenum Alloys

Acknowledgments are made to L.V. Mel'nikova, G.G. Pauler and N.S. Kaplin, who took part in all stages of the investigation, to A.I. Gribov, B.I. Shevchenko, B.S. Kulagin, B.N. Popov and A.A. Diomidova who participated in the large-scale production trials and to Candidate of Technical Sciences, M.V. Poplavko, who directed the work on weldability of the studied alloys.

There are 5 figures, 1 table and 2 Soviet references.

ASSOCIATION: Moskovskiy institut tsvetnykh metallov i zolota. Kafedra metallovedeniya. (Moscow Institute of Non-ferrous Metals and Gold. Chair of Metal Working)

SUBMITTED: June 23, 1958

DANILOVA, G. P.

Third prize (imeni D. K. Chernov) awarded to Engineer V. V. Andreyeva and Engineer V. I. Kazarin (Institute of Physical Chemistry, Ac. Sc., USSR), Engineer G. P. Danilova and Engineer Ye. A. Kamenskaya (Institute of Rare Metals) for their paper "Investigation of the Strength of Titanium Base, Corrosion Resistant Alloys".

Results of the 1958 Competition for Obtaining imeni D. K. Chernov and imeni N. A. Minkevich Prizes, Metallovedeniye i termicheskaya obrabotka metallov, 1959, No. 6, pp 62-64

DANILOVA, G.P.

18(1,3) PHASE I BOOK EXPLOITATION SOV/3402

Soveshchaniye po primeneniyu redkozemel'nykh elementov dlya uluchsheniya fiziko-mekhanicheskikh svoystv konstruktsionnykh i spetsial'nykh staley i splavov

Redkozemel'nyye elementy v stalyakh i splavakh; trudy soveshchaniya.... (Rare Earth Elements In Steels and Alloys; Transactions of a Conference on the Use of Rare Earth Elements To Improve the Physical and Mechanical Properties of Structural and Special Steels and Alloys) Moscow, Metallurgizdat, 1959. 246 p. Errata slip inserted. 3,150 copies printed.

Ed.: A. A. Prozhogin; Ed. of Publishing House: A. L. Ozeretskaya; Tech. Ed.: P. G. Islent'yeva.

PURPOSE: This book is intended for engineers, technicians and scientists engaged in the metallurgy of heavy and nonferrous metals, and may be used by students of higher educational schools, who are specializing in the metallurgical science of these metals.

[illegible] 14 articles which give general results of investigations and uses of rare earths as alloying components in steels and alloys. The influence of rare earth additives in improving the technical properties of structural, fire-resistant and other steels and alloys is also described. Figures, tables and references (mostly Soviet) accompany each article. No personalities are mentioned.

Kogan, B. I., Candidate of Economical Sciences, Institut mineralogii, geokhimii i kristallokhimii redkikh elementov, AN SSSR (Institute for Mineralogy, Geochemistry and Chemical Crystallography of Rare Earth Elements, AS USSR). The State of Rare Earths Production and the Trend in Its Development (According to non-Soviet Literature) 5

Yeremichev, V. V., Engineer, Candidate of Chemical Sciences; N. N. Nikolayev; and R. P. Kuz'mina, Engineer. Methods of Determining Small Amounts of Rare Earths in Steels 26

Savitskiy, Ye. M., Doctor of Chemical Sciences; V. F. Terekhova, Candidate of Technical Sciences; and V. A. Tsikalov, Engineer. Investigation of the Physicochemical Interaction of Rare Earth Metals With Iron and Steel 31

Reznikova, S. Ya., Engineer. Effect of Rare Earths on the Sulfur and Oxygen Contents of Molten Steel and the State of Sulfur in Solid Steel 50

Kultygin, V. S., Engineer. Dependency of the Mechanical Properties of Structural Steel 37KhN3A on Reducing Agents and Methods of Extraction 77

Gulyayev, B. B., Doctor of Technical Sciences; I.A. Snapranov, Candidate of Technical Sciences; O. N. Magnitskiy, Candidate of Technical Sciences; and Z. D. Nekrorova, Engineer. Influence of Rare Earths on the Crystallization and Mechanical Properties of Cast Steel 92

Verbol'skaya, Ye. D., Engineer; I. V. Isakov, Engineer; and A. Ye. Khlebnikov, Doctor of Technical Sciences. The Effect of Cerium Additives on the Properties of Cr-Ni-Mo Steel for Shaped Steel Casting 118

Gol'dshteyn, Ya. Ye., Candidate of Technical Sciences, and O. D. Zhizhakina, Engineer. The Effect of Cerium on the Structure and Properties of Cast and Forged Steel 130

Kopp, L. P., Candidate of Technical Sciences, and G. K. Petukhov, Candidate of Technical Sciences. Study of the Effect of Rare Earths on the Physicomechanical Properties of Cr-Ni-Mo Steel 155

Studnits, N. A., Candidate of Technical Sciences; Yu. K. Konov, Engineer; and A. I. Sokolikov, Engineer. The Influence of Rare Earths on the Nature of Fracture and the Structure and Properties of Steel 183

Danilova, G. P., Candidate of Technical Sciences; N. V. Mal'tsev, Doctor of Technical Sciences; M.V. Poplavko, Candidate of Technical Sciences. Additives for Welding Titanium Alloys 196

Ioffe, V. M., Candidate of Technical Sciences, and V.M. Burov, Engineer. Electrochemical Method of Producing Misch Metal-Magnesium Alloys for Modified Cast Iron 204

Kopp, L. P., Candidate of Technical Sciences; L.M. Shigidina, Engineer; and O. D. Sudakova. The Problems of Causes for the Low Plasticity of Kh23N18-Type Steel at High Temperature and Possibilities of Improving This Condition With Rare Earths 211

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75395
SOV/149-2-5-21/32

AUTHORS: Mal'tsev, M. V., Danilova, G. P., Avidon, A. R.

TITLE: Investigation of Alloys of the Ternary System: Titanium, Aluminum, Niobium

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Tsvetnaya metallurgiya, 1959, Vol 2, Nr 5, pp 145-150 (USSR)

ABSTRACT: Certain properties and compositions of these alloys have been already described by Andreyeva, V. V., et al. (Vysokoprochnye i korrozionnostoykie splavy na osnove titana, VINTI, 1958--High-Strength and Corrosion-Resistant Titanium-Base Alloys, VINTI, 1958). Their excellent ductility and weldability prompts further studies of other compositions. However, state diagrams of these ternary systems do not exist, and to fill this lacuna the authors prepared 20 titanium alloys containing from 1 to 6% Al and from 0.25 to 6% Nb. The melts were made in an arc furnace in an atmosphere of argon; the ingots were hot (800-900°) forged into 10 x 10 mm rods, 150-mm long, cut into specimens, annealed for 45 hr at 1,100° (the specimens were sealed in quartz ampoules to avoid oxida-

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Investigation of Alloys of the Ternary System: Titanium, Aluminum, Niobium

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tion during annealing). The structure of the alloys at different temperatures was determined by heating them to 700, 800, 900 and 1,100° for 120, 80, 48, 10 and 3 hr respectively and by quenching them in cold water. A study of the microstructure showed that specimens quenched at 1,100° have an acicular structure of martensite type. This α-phase is the product of the β-phase breakdown, and is distributed in the grains of the β-phase along definite planes, not at random. A 900° quenching shows a low-temperature phase situated against the background of the decomposed β-phase. Both the α and the α'-phases show a regular pattern in the β-phase pattern. At lower quenching temperatures the amount of α-phase increases. At and above 1,000° the alloys are in the region of β-solid solutions. At 900° an isothermal cross section shows beside β alloys also $\alpha + \beta$ binary and α-one phase alloys. A more detailed phase analysis was made by radiograms according to Debye's method in standard cells with copper radiation. It was found that the acicular α' phase which resulted from the decay of the β-phase has a close-packed

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hexagonal lattice with a somewhat smaller identity period than the α-phase. The α-solid solution has also a hexagonal lattice, the identity periods of which decrease at higher temperature. (There are no conclusions concerning the properties of these different alloys.) There is 1 table; and 6 figures.

ASSOICATION: Krasnoyarsk Institute of Nonferrous Metals; Chair of Metal Studies. State Institute of Rare Metals; Alloy Lab (Krasnoyarskiy institut tsvetnykh metallov; kafedra metallovedeniya. Gosudarstvennyy institut redkikh metallov; laboratoriya splavov).

SUBMITTED: January 23, 1959

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PHASE I BOOK EXPLOITATION SOV/4508

Akademiya nauk SSSR. Institut metallurgii

Titan i yego splavy, vyp. 3: Metallovedeniye titana (Titanium and Its Alloys, No. 3: Metal Science of Titanium) Moscow, Izd-vo AN SSSR, 1960. 161 p. Errata slip inserted. 2,700 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A.A. Baykova.

Resp. Ed.: N.V. Ageyev, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: M.L. Podgoyetskiy; Tech. Ed.: Ye. V. Makuni.

PURPOSE: This collection of articles is intended for scientific research workers and metallurgical engineers.

COVERAGE: The articles summarize results of experimental studies of titanium-base alloys. The microstructure and mechanical properties of titanium-base alloys containing aluminum, chromium or other metals are analyzed along with the effect of oxygen, hydrogen and heat treatment on alloy structure and properties. The tendency of titanium alloys to embrittlement as a result of strain aging is emphasized, and the nitriding of titanium, carried out to increase the surface strength and wear resistance of titanium alloys, is described. Transformations occuring in commercial titanium under conditions of electric heating are examined. Attempts to develop titanium-base alloys capable of withstanding temperatures over 400°C are discussed as are problems of titanium-powder metallurgy and weldability of certain titanium-base alloys. No personalities are mentioned. Most of the articles have bibliographic references, the majority of which are Soviet.

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15

Danilova, G.P.

PHASE I BOOK EXPLOITATION SOV/4164

Vsesoyuznoye soveshchaniye po splavam redkikh metallov. 1st, Moscow, 1957

Redkiye metally i splavy; trudy... (Rare Metals and Alloys; Transactions of the First All-Union Conference on Rare-Metal Alloys) Moscow, Metallurgizdat, 1960. 438 p. 3,150 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Institut metallurgii; USSR Komissiya po redkim metallam pri nauchno-tekhnicheskom komitete.

Ed.: I.I. Shapovalov; Ed. of Publishing House: O.M. Kamayeva; Tech. Ed.: P.G. Islent'yeva.

PURPOSE: This collection of articles is intended for metallurgical engineers, physicists, and workers in the machine-building and radio-engineering industries. It may also be used by students of schools of higher education.

COVERAGE: The collection contains technical papers which were presented and discussed at the First All-Union Conference on Rare-Metal Alloys, held in the Institute of Metallurgy, Academy of Sciences USSR in November 1957. Results of investigations of rare-metal alloys, titanium, and copper-base alloys with additions of rare metals are presented and discussed along with investigations of rhenium, vanadium, niobium, and their alloys. The effect of rare-earth metals on properties of magnesium alloys and steels _ analysed. The uses of rhenium as a dehydrating catalyst, electroplating material, and material suitable for making plugs for automobile electrical systems are discussed. Also, the effect of the addition of certain elements on the properties of heat-resistant steel is examined and alloys with special physical properties (particularly semiconductive alloys) are discussed. No personalities are mentioned. Soviet and non-Soviet references accompany some of the articles.

PART II. TITANIUM, AND COPPER-BASE ALLOYS WITH RARE-METAL ADDITIONS

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(4)

Danilova, G.P.

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D228/D303

18.1285

AUTHORS: Danilova, G. P., Mal'tsev, M. V., poplavko, M. V. and Vladimirskaya, T. M.

TITLE: Addition materials for welding titanium alloys

SOURCE: Akademiya nauk SSSR. Institut metallurgii im. A. A. Baykova. Institut mineralogii, geokhimii i kristallokhimii redkikh elementov. Mezhduvedomstvennaya komissiya po redkim metallam. Vsesoyuznoye soveshchaniye po probleme reniya. Moscow, 1958. Reniy; trudy soveshchaniye. Moscow, Izd-vo AN SSSR, 1961, 203-208

4

TEXT: In this study the aim of the authors was to create a high-grade Ti alloy with a variably modified structure in the cast state. Such material is necessary to eliminate textural defects hindering the full use of certain Ti alloys in welded structures. Details are first given about the preparation of these addition ingredients -- Ti-base alloys with different contents of Al, Nb, Mo, Re, Ce,

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D228/D303

Addition materials for ...

and B. Data on the macrosturcture of cast alloy specimens are then cited. They suggest that the introduction of small amounts of B and B-Zr ($\leqslant$ 0.1%) decreases the grain size of the alloys. But this does not happen on the addition of Re and Ce, which instead causes marked granulation in the ß-phase decay products. A table gives the mechanical properties of annealed alloys; it is noted that the introduction of B and B-Zr greatly strengthens Ti-Al-Nb alloy, as does the addition of Re to Ti-Al-Mo alloy. Turning to the question of the alloys' behavior during welding and plastic deformation, the authors adduce graphs to illustrate their experimental observations. These indicate that the addition of Re greatly enhances the plasticity of the welded seam in both types of alloy: The seam's bending angle is thereby increased by approx. threefold. Here Re is believed to stabilize the ß-phase. The authors conclude from the results of their research that three kinds of Ti-base alloy can be employed as addition materials: 1) with Al 3, Nb 5, and Re 0.1%; 2) with Al 3, Mo 4, and Re 0.05-0.1%; and 3) with Al 5, Nb 5, and B 0.05%. The application of such materials will raise the quality

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Addition materials for ... S/697/61/000/000/016/018
D228/D303

of the welded seam and thus expand the employment of Ti alloys in the production of welded structures. There are 4 figures, 1 table and 3 Soviet-bloc references.

Card 3/3

SMIRNOV, B.P.; POPOVA, R.A.; DANILOVA, G.P.; NISKANEN, R.A.

Paper chromatography of bile acids in the form of methyl esters ($R.COO.C^{14}H_3$). Biokhimiia 27 no.2:197-201 Mr-Ap '62. (MIRA 15:8)

1. Laboratory of Lipid Biochemistry, Biological Institute of the Karelian Branch of Academy of Sciences of the U.S.S.R., Petrozavodsk.
(PAPER CHROMATOGRAPHY) (BILE ACIDS)

DANILOVA, G.V.; LOYTER, M.N.; ALEKSEYEV, N.A.; KOVALEV, I.I.; DANILOV, A.Ye.; SHENDRIKOV, G.L., i.o. glavnogo metodista; ORLOVA, V.P., redaktor; PAVLOVA, M.M., tekhnicheskiy redaktor

["Water resources management and rural hydroelectric power stations" pavilion; a guidebook] Pavil'on "Vodnoe khoziaistvo i sel'skie gidroelektrostantsii"; putevoditel'. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 21 p. (MIRA 9:12)

1. Moscow. Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1954-
2. Direktor pavil'ona (for Danilova)
    (Moscow--Agricultural exhibitions)
    (Water supply, Rural)
    (Hydroelectric power stations)

MARKOV, P.V., kandidat sel'skokhozyaystvennykh nauk starshiy nauchnyy sotrudnik; DANILOVA, G.V., inzhener; ALEKSEYEV, N.A., inzhener; OZEROV, V.N., redaktor; PERESYPKINA, Z.D., tekhnicheskiy redaktor; PEVZNER, V.I., tekhnicheskiy redaktor

[Agricultural reclamation work; based on data from the All-Union Agricultural Exhibition] Sel'skokhoziaistvennye melioratsii; po materialam Vsesoiuznoi sel'skokhoziaistvennoi vystavi. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 511 p. (MLRA 9:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii (for Markov)
(Reclamation of land)

DANILOVA, G.V.

DANILOVA, G.V., inzh.

Water resources are the source of wealth. Nauka i pered. op. v sel'khoz. 7 no.12:32-34 D '57. (MIRA 11:1)

(Irrigation)

TREMBOVEL'SKIY, Dmitriy Ivanovich; DANILOVA, G.V., otvetstv.za vypusk;
ZABORSKIY, N.I., red.; USHKOVA, M.P., tekhn.red.

[Hydraulic ram] Gidravlicheskii taran. 1958. 9 p. (MIRA 12:3)

1. Moscow. Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1958- .
(Hydraulic rams)

DANILOVA, G.V.; ZHURAVKOV, S.A., inzh.

Water management at the Exhibition of the Achievements of the National Economy of the U.S.S.R. in 1960. Gidr. i mel. 12 no. 12:48-55 D '60. (MIRA 14:1)

1. Direktor pavil'ona Vodnogo khozyaystva (for Danilova).
(Water-supply engineering--Exhibitions)
(Drainage--Exhibitions)

DANILOVA, G.V., inzh.; RYL'KOV, K.A., inzh.

Polymers and synthetic materials in water management; at the thematic exhibition in the Water Management Pavilion of the Exhibition of Achievements of the National Economy of the U.S.S.R. Gidr. i mel. 15 no.7:43-52 Jl '63.
(MIRA 16:8)

DANILOVA, G.V.

Irrigation farming and water resources management at the Exhibition of Achievements of the National Economy of the U.S.S.R. Gidr. i mel. 17 no.7:57-63 Jl '65.

(MIRA 18:12)

1. Direktor pavil'ona oroshayemogo zemledeliya i vodnogo khozyaystva na Vystavke dostizheniy narodnogo khozyaystva S.S.S.R.

DANILOVA, I.A.

A. P. Pavlov's views on the Quaternary glacial epochs in Europe.
Zhizn' Zem. no.1:204-210 '61. (MIRA 15:6)
(Glacial epoch)
(Pavlov, Aleksei Petrovich, 1854-1929)

DANILOVA, I.M. (Moskva)

Nonsettled temperature field in a wedge with discontinuous boundary conditions. Izv. AN SSSR. Otd. tekh. nauk. Energ. i transp. no.3:345-347 My-Je '63. (MIRA 16:8)

DANILOVA, I. N.

DANILOVA, I. N. - "Lifting Ability and Plastic Deformation of Rotors." Acad Sci USSR, Inst of Mechanics, Moscow, 1955 (Dissertations for the Degree of Candidate of Physico-mathematical Sciences)

SO: *Knizhnaya Letopis'* No. 24, June 1955, Moscow

DANILOVA, I.N. (Moskva)

Effect of borehole sizes on the bearing capacity of rotors. Izv. AN SSSR.Otd.tekh.nauk no.5:122-123 My '56. (MLRA 9:8)
(Rotors)

AUTHOR: Danilova, I.N. (Moscow) SOV/24-58-6-18/35

TITLE: The Influence of Non-Uniform Heating and the Compressibility of a Material on the Load-carrying Capacity of a Solid Rotor (Vliyaniye neravnomernogo nagreva i szhimayemosti materiala na nesushchuyu sposobnost' sploshnogo rotora)

PERIODICAL: Izvestiya Akademii Nauk SSSR Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 6, pp 104-106 (USSR)

ABSTRACT: The two effects are considered separately. In discussing the influence of non-uniform heating it is assumed that the rotor is working in a temperature field which varies non-uniformly along the radius of the rotor. The temperature is assumed to obey a linear law as a function of the radius. The material of the rotor is assumed incompressible. The rotor is subject only to the action of the force of inertia. The results are illustrated by a graph from which it is seen that after the limit velocity is reached a very small further increase in the velocity leads to a considerable increase in the intensity of deformation. It is also seen that taking into account the

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SOV/24-58-6-18/35

The Influence of Non-Uniform Heating and the Compressibility of a Material on the Load-carrying Capacity of a Solid Rotor

non-uniform distribution of temperature leads to a reduction in the limit velocity, but this is so small as to be insignificant in practice. In the second part of the problem the material of the rotor is assumed compressible and the temperature in the rotor to be distributed uniformly. The results are again illustrated graphically and it can be seen that after the limit velocity is attained a further small increase in the velocity causes a considerable increase in the intensity of deformation. It is also seen that taking the compressibility of the material into account leads to a reduction of the load-carrying capacity, but this reduction is so small as to be insignificant in practice.

There are 2 figures and 3 Soviet references.

ASSOCIATION: Institut Mekhaniki (Institute of Mechanics)

SUBMITTED: February 28, 1958

Card 2/2

SOV/24-58-10-23/34

AUTHOR: Danilova, I. N. (Moscow)

TITLE: The Theory of a Toroidal Compensator Acted Upon by an Axial Tensile Force Under Conditions of Creep (Raschet toroobraznogo kompensatora, nakhodyashchegosya pod deystviyem osevoy rastyagivayushchey sily v usloviyakh polzuchesti materiala)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, 1958, Nr 10, pp 127-129 (USSR)

ABSTRACT: The compensator under consideration is in the form of a complete toroid with a narrow slit as shown in Fig.1, in which the symbols used are also indicated. Only small values of the parameter $\lambda = b/a$ are considered. The compensator works in conditions of steady creep. The solution is based on the treatment given by Dahl (Ref.1) and assumes that

$$N_0 = \sum A_n \cos 2n\phi \quad .$$

A system of equations for the solution of the problem is obtained and this can be solved by an approximate method.

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SOV/24-58-10-23/34

The Theory of a Toroidal Compensator Acted Upon by an Axial Tensile Force Under Conditions of Creep

The method may also be used to solve the problem of a semitoroidal compensator without major modifications. There are 2 figures and 2 references, 1 Soviet and 1 English.

SUBMITTED: November 6, 1957.

Card 2/2

SOV/24-58-12-26/27

AUTHOR: Danilova, I.N. (Moscow)

TITLE: The Temperature Distribution in an Infinite Hollow Cylinder with Heat Exchange at the Boundaries with Media at Variable and Constant Temperature (Raspredeleniye temperatury v neogranichennom polom tsilindre pri teploobmene na granitsakh so sredami peremennoy i postoyannoy temperatury)

PERIODICAL: Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 12, pp 148-150 (USSR)

ABSTRACT: The case where the surfaces of the cylinder are at constant temperatures T_1 and T_2 respectively was considered by Lykov (Ref.2). The present paper is concerned with the temperature distribution in an infinite hollow cylinder when the inner surface is in contact with a medium at a constant temperature and the outer surface is in contact with a medium at a variable temperature. The variable temperature changes according to the linear law $T_1 = T_{10} + At$ while the constant temperature is T_2. T_{10} and A are constants. The initial temperature of

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The Temperature Distribution in an Infinite Hollow Cylinder with Heat Exchange at the Boundaries with Media at Variable and Constant Temperature

the cylinder is taken as constant and equal to T_0. The process is described by

$$\frac{\partial T}{\partial t} = k\left(\frac{\partial^2 T}{\partial r^2} + \frac{1}{r}\frac{\partial T}{\partial r}\right)$$

where k is the conductivity. The boundary conditions are

$$\frac{\partial T}{\partial r} = h_1(T_{10} + At - T) \text{ at } r = b$$

and $$\frac{\partial T}{\partial r} = -h_2(T_2 - T) \text{ at } r = a$$

where $h_{1,2}$ are constants. The above differential equation is solved by an operator method using these boundary conditions. The full solution is given in a form of a complicated series by Eq.10. There are

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SOV/24-58-12-26/27

The Temperature Distribution in an Infinite Hollow Cylinder with Heat Exchange at the Boundaries with Media at Variable and Constant Temperature

2 figures and 3 Soviet references.

SUBMITTED: 4th April 1958.

Card 3/3

AUTHOR: Danilova, I.N., (Moscow) SOV/24-59-1-25/35

TITLE: Temperature Changes in an Infinite Hollow Cylinder When the Temperature of the External Medium Changes in Step Form (O temperaturnom pole v neogranichennom polom tsilindre, kogda temperatura vneshney sredy menyayetsya po zakonu lomanoy)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, Energetika i Avtomatika, 1959, Nr 1, pp 131-133 (USSR)

ABSTRACT: Previous work by the author (Ref 1) has dealt with the case of the temperature distribution in an infinite hollow cylinder when its outer surface is in contact with a medium subjected to a linear variation of temperature, while the inner surface is in contact with a medium of constant temperature. In the case now dealt with, the external medium has a step-wise change of temperature and the internal medium remains at constant temperature. The temperature variation T is defined in terms of time t and equations are developed for the heat conduction using symbols defined in the previous work. Expressions are obtained for the temperature of any point within the cylinder for each stage of the

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SOV/24-59-1-25/35

Temperature Changes in an Infinite Hollow Cylinder When the Temperature of the External Medium Changes in Step Form

cycle of the temperature of the outer medium, as shown in the figure. Bessel functions are used. The second part deals with the particular case of a solid cylinder of radius r and analogous expressions are given for the temperature. There is 1 Soviet reference.

SUBMITTED: 26th April 1958

Card 2/2

67609

24.4100

SOV/179-59-5-34/41

AUTHOR: Danilova, I.N. (Moscow)

TITLE: The Calculation of the Stress 14 State in a Rotor 23 with Unsteady Creep 14

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1959, Nr 5, pp 161-165 (USSR)

ABSTRACT: The paper is a continuation of previous work (Ref 3). The rotor is regarded as a hollow infinite cylinder of internal and external radii a and b. During the starting period $(0 \leqslant t \leqslant t_1)$, the angular velocity increases linearly, after which the velocity remains constant until the moment of switching off (t_2), when the velocity instantaneously drops to zero. During the period $0 \leqslant t \leqslant t_1$, the temperature of the gas surrounding the external surface of the rotor increases linearly with time; it remains constant from t_1 to t_2, and then instantaneously drops to zero. Assuming a power law of creep and allowing for the thermal effects formulae are obtained for the radial, circumferential and axial stress components (σ_r, σ_θ and σ_z) respectively, and equations for $s = \sigma_{max} - \sigma_{min}$ are derived for the following cases:

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SOV/179-59-5-34/41

The Calculation of the Stress State in a Rotor with Unsteady Creep

(1) $\sigma_r > \sigma_\theta > \sigma_z$; (2) $\sigma_\theta > \sigma_r > \sigma_z$; (3) $\sigma_\theta > \sigma_z > \sigma_r$; (4) $\sigma_r > \sigma_z > \sigma_\theta$. On the basis of these results, a general form is found for the creep equation and a method of integrating it by steps is described. A numerical example with the following basic data is discussed: In 7 min the angular velocity increases from 0 to 10500 rpm and the gas temperature from 180 to 550 °C. The total working time for the rotor is 150 min. The calculations were carried out on the electronic computer of the Computing Centre, Moscow University, and the results are shown graphically. There are 2 figures and 4 Soviet references.

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SUBMITTED: April 26, 1959

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S/030/60/000/011/026/026
B021/B056

AUTHOR: Danilova, I. N.

TITLE: Investigation of the Thermal Stresses in the Components of Turbines 25

PERIODICAL: Vestnik Akademii nauk SSSR, 1960, No. 11, pp. 131-132

TEXT: A scientific conference was held at Kiyev from July 6 to July 7, 1960. It dealt with thermal stresses in rods, plates, and shells in turbine construction. The conference had been convened jointly by the Komissiya po turbinnym ustanovkam GNTK USSR (Commission for Turbine Plants of the State Scientific Technical Committee UkrSSR) and the Komissiya po prochnosti gazovykh turbin Akademii nauk SSSR (Commission for the Stability of Gas Turbines of the Academy of Sciences USSR) together with the Institut mekhaniki Akademii nauk USSR (Institute of Mechanics of the Academy of Sciences Ukrainskaya SSR). Mainly two types of problems were investigated: The calculation of temperature fields in the components of turbines, and the determination of the thermal stresses under the conditions of elasticity and plasticity. Further, the following reports

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Investigation of the Thermal Stresses in
the Components of Turbines

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B021/B056

were delivered: A. D. Kovalenko spoke about the solution of problems concerning thermal stresses; A. G. Kostyuk on the fraction methods of the components of gas turbines; S. Ya. Yarema on the solution of the problem of concentrated heating of a long cylindrical shell; Ye. I. Molchanov and Ye. R. Plotkin on an approximate method of calculating the temperature fields of a turbine vane under non-steady conditions; V. I. Danilovskaya on a method of calculating steady temperature fields and thermal stresses in plane components. V. I. Savchenko spoke about the method of photo-thermoelasticity for the purpose of determining thermal stresses in plane models; Ye. I. Molchanov on curves of the dependence of the number of load cycles leading to destruction on the extent of plastic deformations; Ye. S. Muslin spoke about the destruction of turbine disks as a result of low temperature of the disk edge; S. F. Fol'kovskiy on formulas for determining the temperature distribution in the tubewalls as a function of the heating rate. The following disadvantages were criticized: in a number of reports, general solutions for investigating the stress state of turbine components were not sufficiently used The lack of theoretical and experimental investigations of various heat exchange processes is stressed. The conference outlined measures for extending theoretical and

Card 2/3

Investigation of the Thermal Stresses in the Components of Turbines

S/030/60/000/011/026/026
BC21/BC56

experimental work in the field of aeromechanics and gas dynamics of thermal engines.

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39810

10.6400

S/179/62/000/003/012/015
E199/E435

AUTHOR: Danilova, I.N. (Moscow)

TITLE: On temperature stresses in a hollow sphere with a variable elastic modulus

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, no.3, 1962, 165-167

TEXT: It is assumed that temperature and the modulus of elasticity vary proportionally to the radius. The problem is based on the following equation

$$\frac{d^2u}{d\rho^2}+\left(\frac{1}{E}\frac{dE}{d\rho}+\frac{2}{\rho}\right)\frac{du}{d\rho}+\frac{2}{\rho}\left(\frac{\nu}{1-\nu}\frac{1}{E}\frac{dE}{d\rho}-\frac{1}{\rho}\right)u=\alpha\frac{1+\nu}{1-\nu}\frac{1}{E}\frac{d}{d\rho}(ET) \qquad (4)$$

where U - radial displacement, $\rho = r/r_1$, $u = U/r_1$, r_1 - internal radius, r_2 - external radius. The above equation is derived from Hook's law and an equation of equilibrium in the radial direction. Assume that $E = N\rho^n$ and let $\rho = e^\xi$, substitution of ρ by e^ξ reduces the original equation to a linear one which in turn, by expressing u as an exponential

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E199/E435

On temperature stresses ...

function, can be transformed to a Riccati's equation which can be solved using boundary conditions. A particular case with $E(\rho) = Ke^{k\rho}$, $\nu = 1/3$, where K and k - some constants, is included. In this case

$$\frac{d^2u}{d\rho^2} + \left(k + \frac{2}{\rho}\right)\frac{du}{d\rho} + (k\rho - 2)\frac{u}{\rho^2} = 2\alpha\left(kT + \frac{dT}{d\rho}\right) \qquad (9)$$

This equation is solved using Bessel functions. In a special case, the temperature distribution is hyperbolic. The solution can then be expressed by integrals evaluated analytically.

SUBMITTED: February 17, 1962

Card 2/2

DANILOVA, I.N.(Moskva)

Thermal stresses in a rectangular wedge. Izv.AN SSSR.Otd.tekh.nauk.Mekh. i mashinostr. no.5:80-85 S-O '62. (MIRA 15:10)
(Thermal stresses) (Wedges)

CZECHOSLOVAKIA

BARTKO, D.; DANISOVA, J.; WAGNEROVA, M.; Neurological Clinic, Medical Faculty, Comenius University (Neurologicka Klinika Lek. Fak. UK), Bratislava.

"Acute Brain Hypoxia and the Proteins of the Cerebrospinal Fluid"

Prague, Ceskoslovenska Neurologie, Vol 30, No 1, Jan 67, p 72

Abstract: During brain hypoxia all the albumin fractions were reduced, and all the globulin fractions, with the exception of beta-globulin fraction, were increased. There were no differences in supra- and infratentorial lesions. The seriousness of the affliction had only a limited effect on the changes in the spectrum of the proteins. It appears that the changes are due to extravasal structures. No references. Submitted at the Meeting of the Neurological Section, Slovak Branch. Kosice 16 - 18 Jun 66.

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DANILOVA, K.F

62-58-4-16/32

AUTHORS: Nazarov, I. N., Sharifkanov, A. Sh., Danilova, K.F.

TITLE: Heterocyclic Compounds (Geterotsiklicheskiye soyedineniya). Communication 59: Anesthetizing Synthetic Substances (Soobshcheniye 59: Sinteticheskiye obezbolivayushchiye veshchestva). XX. Synthesis of the Benzoic and Phenylacetic Esters 1-Alkenyl-2,5-Dimethyl-4-Ethyl-4-Piperidoles (XX. Sintez benzoynykh i fenoksiuksusnykh efirov 1-alkenil-2,5-dimetil-4-etil-4-piperidolov)

PERIODICAL: Izvestiya Akademii Nauk SSSR,Otdeleniye Khimicheskikh Nauk, 1958, Nr 4, pp. 452 - 459 (USSR)

ABSTRACT: In the previous work some benzoates and phenoxyacetates of 1-alkenyl-2,5-dimethyl-4-ethinyl-4-piperidole were described. Among them are some compounds which have strong anesthetizing effects. In continuation of these investigations the authors decided to synthetize benzoates and phenoxyacetates of 1-alkenyl-2,5-dimethyl-4-ethinyl-4-piperidole. The initial 1-alkenyl-2,5-dimethyl-4-ethinyl-4-piperidole (formulae I-III)

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62-58-4-10/32

Heterocyclic Compounds. Communication 59: Anesthetizing Synthetic Substances. XX. Synthesis of the Benzoic and Phenylacetic Esters 1-Alkenyl 2,5-Dimethyl-4-Ethyl-4-Piperidoles

were produced in great yields (70%) by condensation of lithium ethyl with 1-alkenyl-2,5-dimethyl-4-piperidones (Reference 4). For the purpose of separating the individual compounds the mixtures of isomeric piperidoles were converted to salts of hydrogen chloride. By means of the esterification of the 1-alkenyl-2,5-dimethyl-4-ethyl-4-piperidole with chlorine anhydride of benzoic and phenylacetic acid corresponding 1-alkenyl-2,5-dimethyl-4-ethyl-4-piperidoles were produced as a mixture of stereochemical isomers. Synthetized were: benzoic and phenylacetic esters of 1-alkenyl-2,5-dimethyl-4-ethyl-4-piperidole (formulae IV - VIII). They were subjected to a pharmacological investigation with regard to their anesthetizing properities. It showed that phenylacetic esters of the λ-form of 1-crotyl-2,5-dimethyl-4-ethyl-4-piperidoles is remarkably more active than dikaine, however, its toxicity is twice as great.

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62-58-4-10/32

Heterocyclic Compounds. Communication 59: Anesthetizing Synthetic Substances. XX. Syrthesis of the Benzoic and Phenylacetic Esters 1-Alkenyl-2,5-Dimethyl-4-Ethyl-4-Piperidoles

There are 1 table, and 4 references, 3 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR i **Kazakhskiy** gosudarstvennyy universitet im. S. M. Kirova (Institute for Organic Chemistry imeni N. D. Zelinskiy / AS USSR and **Kazakh** State University imeni S. M. Kirov)

SUBMITTED: November 20, 1956

AVAILABLE: Library of Congress

1. Heterocyclic compounds 2. Benzoic esters--Synthesis
3. Phenylacetic esters--Synthesis

Card 3/3

AUTHORS: Nazarov, I. N., Sharifkanov, A. Sh., Danilova, K. F. SOV/62-58-6-14/37

TITLE: Heterocyclic Compounds (Geterotsiklicheskiye soyedineniya) Communication 60. Synthetic Analgesic Substances. XXI. Synthesis of Esters of the α-Form of 1-Alkenyl-2,5-Dimethyl-4-Piperidols (Soobshcheniye 60. Sinteticheskiye obezbolivayushchiye veshchestva. XXI. Sintez efirov α-formy 1-alkenil-2,5-dimetil-4-piperidolov)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 6, pp. 739 - 747 (USSR)

ABSTRACT: In the present paper the authors describe the synthetization of a number of new esters (of the α-form) of secondary 1-alkenyl-2,5-dimethyl-4-piperidols with a view of explaining the influence exercised by unsaturated nitrogen radicals and the effect produced by the character of the azyl rest upon the physiological activity of these compounds. By the interaction between the α-form of the 2,5-dimethyl-4-piperidol and halide derivatives of the allyl type various 1-alkenyl-(alkadienyl)-2,5-dimethyl-4-piperidols (Formulae I-VI) were synthetized with a high yield.

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Heterocyclic Compounds. Communication 60. Synthetic Analgesic Substances. XXI. Synthesis of Esters of the α-Form of 1-Alkenyl-2,5--Dimethyl-4-Piperidols SOV/62-58-6-14/37

By the esterization of piperidols (Formulae I-VI) by means of acid chloroanhydrides complex esters (Formulae VII-XIX) were obtained. They were pharmacologically tested with respect to their anaesthetizing properties. Among the compounds investigated propion-and acetic esters of 1-crotyl-2,5-dimethyl-4-piperidol (Formulae XIII and XIV) showed very weak activity. All other esters investigated show high anaesthetizing activity and relatively low toxicity. There are 2 tables and 9 references, 8 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N.D.Zelinskogo i Kafedra organicheskoy khimii Kazakhskogo gosudarstvennogo universiteta im.S.M.Ki-ova (Institute of Organic Chemistry imeni N.D. Zelinskiy and Chair of Organic Chemistry of Kazakh State University imeni S.M.Kirov)

SUBMITTED: November 2o, 1956

Card 2/3

Heterocyclic Compounds. Communication 60. Synthetic Analgesic Substances. XXI. Synthesis of Esters of the α-Form of 1-Alkenyl-2,5-Dimethyl-4-Piperidols SOV/62-58-6-14/37

1. Esters--Synthesis 2. Esters--Physiological effects 3. Nitrogen radicals --Chemical effects

Card 3/3

DANILOVA, K. M., and ANICHKOV, N. N.

Eine einfache Methode zur elektiven Darstellung der v Kupffer schen Sternzellen. Centralblatt fur allgemeine Pathologie, 61, 52-54, 1934.

DANILOVA, K.M.

Effect of nutritional disorders and infections on the cellular connective tissue. Arkh.pat., Moskva 13 no.3:41-49 May-June 51.
(CLML 21:1)

1. Candidate Medical Sciences. 2. Of the Department of Pathological Anatomy of the Therapeutic Faculty (Head--Honored Worker in Science Prof. I.V. Davydovskiy, Active Member of the Academy of Medical Sciences USSR), Second Moscow State Medical Institute imeni I.V.Stalin.

DANILOVA, K.M. (Moskva)

Tissue of the internal environment in leukoses. Arkh.pat., 17
no.2:12-21 Ap-Je '55. (MLRA 8:10)

1. Iz kafedry patologicheskoy anatomii lechebnogo fakul'teta
II Moskovskogo gosudarstvennogo meditsinskogo instituta imeni
I.V.Stalina (Zav.--deystvitel'nyy chlen AMN SSSR prof. I.V.
Davydovskiy)
(LEUKEMIA, pathology,
connective tissue, porous)
(CONNECTIVE TISSUE, in various diseases,
leukemia, porous tissue)

DANILOVA, K.M.

USSR/General Problems of Pathology - Pathophysiology of the Infectious Process. T-4

Abs Jour : Ref Zhur - Biol., No 1, 1958, 3059

Author : Danilova, K.M.
Inst : -
Title : Human Loose Connective Tissue in Infectious and Allergic Diseases.

Orig Pub : V sb.: Tr. Vses. Konferentsii Patologoanatomov. M., Medgiz, 1956, 92-95 Diskus., 231-239.

Abstract : Connective tissues respond to different infectious agents by diffuse histiocytic reactions of varying intensities. A histiocytic group of cells (macrophages), developing from the adventitias, is predominant. The morphology of connective tissue in allergic and infectious diseases is similar. Macrophage reaction occurs because of the activity of trophic and protective mechanisms within the body. Increased metabolism may be lowered by a block which is

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USSR/General Problems of Pathology - Pathophysiology of the Infectious Process.

Abs Joue : Ref Zhur - Biol., No 1, 1958, 3059

followed by hyperglobulineymia and a plasmotization of macrophages. These changes are more pronounced in allergic diseases.

Card 2/2

DANILOVA, K.M. (Moskva)

Problems to be solved in the origin and functional significance of mast cells. Arkh.pat. 20 no.1:3-12 '58. (MIRA 13:12)

1. Iz kafedry patologicheskiy anatomii (zav. - deystvitel'nyy chlen AMN SSSR I.V. Davydovskiy) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.

(MAST CELLS)

DAVYOVSKIY, I.V.; DANILOVA, K.M.; GULINA, L.A.; POKROVSKAYA, L.Ya.
PYATNITSKIY, N.N.; T NYAKOV, Yu.G.; KHOKHLOVA, Z.Ye.; CHESNOKOVA, S.A.

Experimental morphological analysis of tissue systems of the body in "decorticated" animals. Arkh. pat. 22 no. 8:18-34 '60.

(MIRA 14:1)

(CEREBRAL CORTEX)

DANILOVA, K.M.

Effect of pyrogenal on connective tissue. Pat. fiziol. i eksp. terap. 5 no.5:24-31 '61 (MIRA 17:4)

DANILOVA, K.M. (Moskva)

Nature of experimental adrenaline myocarditis. Arkh.pat. no.11:
11-18 '61. (MIRA 14:10)

1. Iz laboratorii gerontologii, rukovodimoy deystvitel'nym
chlenom AMN SSSR I.V. Davydovskim.
(ADRENALINE) (HEART—DISEASES)

DANILOVA, K.M. (Moskva)

Morphological tests of the stress reaction in the human myocardium. Arkh. pat. 25 no.7:42-49 '63 (MIRA 16:12)

1. Iz laboratorii patologii starosti (zav. - deystvitel'nyy chlen AMN SSSR prof. I.V.Davydovskiy) Instituta morfologii cheloveka (dir. - chlen-korrespondent AMN SSSR prof. A.P. Avtsyn) AMN SSSR.

VOLKOVA, K.G., prof. (Leningrad); DANILOVA, K.M., doktor med. nauk (Moskva); SMOLICHEVA, Ye.P., kand. med. nauk; MONASTYRASKAYA, B.I., prof.

Report on conferences. Arkh. pat. 26 no.4:86-93 '64. (MIRA 18:7)

1. Predsedatel' Nauchnogo obshchestva patologoanatomov, sudebnykh medikov i kriminalistov, Dushanbe (for Monastyrskaya). 2. Sekretar' Nauchnogo obshchestva patologoanatomov, sudebnykh medikov i kriminalistov, Dushanbe (for Smolicheva).

DANILOVA, K.M. (Moskva)

Mechanisms of cardiosclerosis. Arkh. pat. 27 no.6:24-33 '65.
(MIR [illegible])

1. Laboratoriya patologii starosti (zav. - deystvitel'nyy chlen AMN SSSR prof. I.V. Davydovskiy) Instituta morfologii cheloveka (direktor - deystvitel'nyy chlen AMN SSSR prof. A.P. Avtsyn) AMN SSSR. Submitted January 23, 1964.